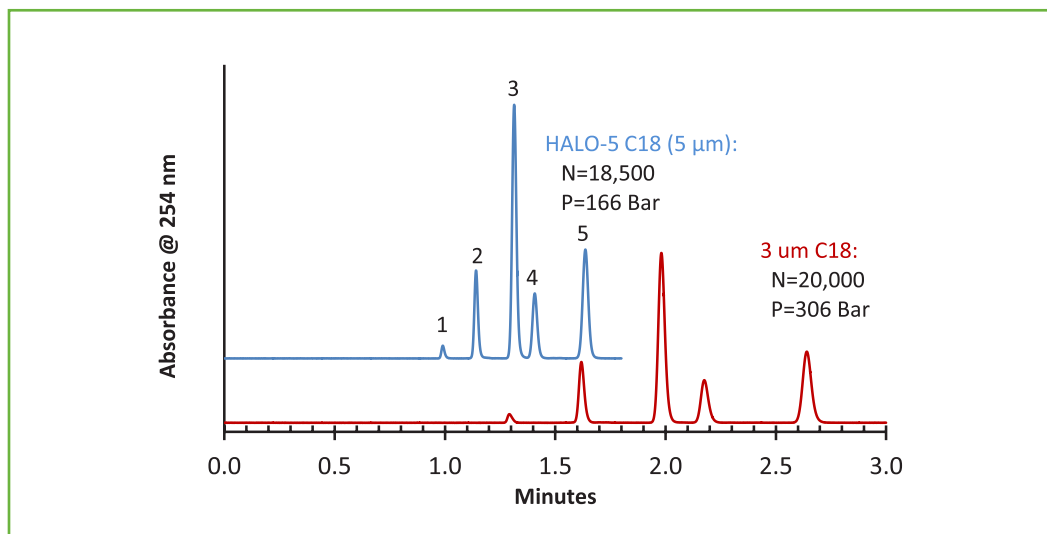




Comparison of Separations on HALO® 5 µm Fused-Core® C18 and a Competitive 3.0 µm Totally Porous C18 Phase

Application Note 73-PS



PEAK IDENTITIES:

1. Uracil (t_R)
2. Fenuron
3. Monuron
4. Fluometuron
5. Diuron

The chromatograms pictured show similar column efficiencies between the two packings but with much lower back pressure in the case of the HALO® 5 µm, allowing users with lower pressure HPLC instruments to get 3.0 µm particle performance with the lower pressure requirement of a 5 µm particle.

TEST CONDITIONS:

Columns:

1) HALO 90 Å C18, 5 µm, 4.6 x 150 mm

Part Number: 95814-702

2) Totally porous C18, 3.0 µm, 4.6 x 150 mm

Mobile Phase: 25/75 - A/B

A: 0.02 M potassium phosphate buffer, adj. to pH 3.0

B: Methanol

Flow Rate: 1.3 mL/min

Pressure: 166 bar (HALO®)

306 bar (competitor)

Temperature: 30 °C

Detection: UV 254 nm, VWD

Injection Volume: 0.5 µL

Sample Solvent: 50/50 water/methanol

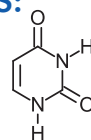
Response Time: 0.02 sec

Flow Cell: 2.5 µL semi-micro

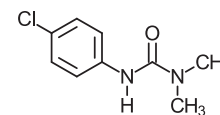
LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 µL

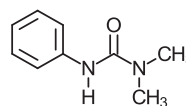
STRUCTURES:



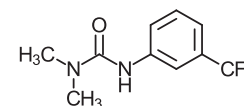
Uracil



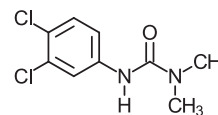
Monuron



Fenuron



Fluometuron



Diuron

